

CURRICULUM VITAE

ANDERS LINDQUIST

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EDUCATION

1967	MS (civiling) in Engineering Physics	Royal Institute of Technology (KTH)
1968	TeknL in Optimization and Systems Theory	Royal Institute of Technology (KTH)
1972	PhD in Optimization and Systems Theory	Royal Institute of Technology (KTH)

POSITIONS

2011 – present	Zhiyuan Chair Professor, Shanghai Jiao Tong University, Shanghai, China
2009 – present	Professor Emeritus, KTH Royal Institute of Technology
2006 – 2016	Director, Center for Industrial and Applied Mathematics (CIAM), KTH
1982 – 2009	Professor, Chair of Optimization and Systems Theory, KTH, Sweden
2000 – 2009	Head of the Department of Mathematics, KTH, Sweden
1989 – 2009	Affiliate Professor, Washington University, St. Louis
1980 – 1984	Professor, University of Kentucky
1974 – 1980	Associate Professor, University of Kentucky
fall sem 1973	Associate Professor (Research), Brown University
1972 – 1973	Assistant Professor, University of Florida (postdoc with R.E. Kalman)
1967 – 1968	Researcher, Swedish Institute of National Defense

HONORS AND AWARDS

1989	Fellow of IEEE (Institute of Electrical and Electronics Engineers)
1996	Member of the Royal Swedish Academy of Engineering Sciences
1997	Foreign Member of Russian Academy of Natural Sciences
1994	Honorary Member of Hungarian Operational Research Society
2000	Zaborszky Lecturer for the year 2000 (www2.math.kth.se/~alq/ZaborszkySeries.pdf)
2001	SIGEST Award from the editorial board of SIAM Review
2002	Gordon McKay Visiting Professor University of California, Berkeley
2003	George S. Axelby Outstanding Paper Award of the IEEE Control Systems Society (CSS) for the year 2003
2005	Distinguished Israel Pollak Lecturer for the academic year 2005/2006
2009	W.T. and Idalia Reid Prize in Mathematics for 2009, awarded by the Society for Industrial and Applied Mathematics (SIAM)
2010	Fellow of SIAM (Society for Industrial and Applied Mathematics)
2010	Honorary Doctor (Doctor Scientiarum Honoris Causa) at Technion (Israel Institute of Technology), Haifa
2010	Fellow of IFAC (International Federation of Automatic Control)
2010	Life Fellow of IEEE (Institute of Electrical and Electronics Engineers)
2010	Borelius Medal from the Science School of the Royal Institute of Technology
2015	Foreign Member of the Chinese Academy of Sciences
2016	Shanghai Magnolia Award (for contributions to the city's development)
2016	Honorary Professor at China University of Petroleum, Qingdao
2019	Friendship Award from Chinese government
2019	Knight Commander with Star of OESSH
2020	IEEE Control Systems Award, the IEEE Field Award in Systems and Control
2020	Elected Member of Academia Europaea (The Academy of Europe)

OTHER APPOINTMENTS

- 2017–2020 Member of the IFAC Manfred Thoma Medal Selection Committee
- 2015 External Member of the Consultative Committee of Research Center of Excellence for Mathematical Sciences (RCEMS), Chinese Academy of Sciences
- 2014 Member of the International Evaluation Committee of the Department of Mathematics, Shanghai Jiao Tong University, July 2014
- 2014 Member of SJTU Mathematical Sciences Steering Committee, to oversee the future development of mathematical sciences on campus, 2014
- 2013– 2017 Member of the Prize Committee of the Chen Han-Fu Award of the Chinese Society of Automatic Control, 2013 –
- 2012 Member of Expert Diagnostic Assessment Committee for evaluating the Academy of Mathematics and Systems Science, Chinese Academy of Sciences, November 2012
- 2010 Selection Committee for the 2010 Axelby Outstanding Paper Award
- 2007 – 2010 Fellow Nominations Chair of the IEEE Control Systems Society
- 2009 – 2010 Prize Committee for the ICIAM Collatz Prize
- 2006–2011 IFAC Young Author Prize Selection Committee
- 2005 Control System Society evaluation committee for selection of IEEE Fellows
- 2005–2008 Prize Committee for the European Congress of Mathematics
- 2006–2010 Committee on Applied Mathematics of the European Mathematical Society
- 2001–2003 Vice-chairman, Division VII of the Royal Swedish Academy of Engineering Sciences (IVA)
- 2004–2010 Member, Board of Governors, Israel Institute of Technology (Technion), Haifa
- 2004– Board Member, Foundation “Nordic Information Processing” (BIT)
- Spring 2003 Scientific leader at Institut Mittag-Leffler, Djursholm, Sweden. (Program on Mathematical Control and Systems Theory)
- 2002 – 2007 Team leader, European project “Real-time embedded control of mobile systems with distributed sensing” (RECSYS)
- 1996 – 2006 Member of Board, Strategic Center for Autonomous Systems, KTH
- 1997 – 2002 Advisory Board Member of the Institute for Mathematics of the Life Sciences, Texas Tech University
- 1993 – 1997 Team leader, European Research Network for System Identification

EDITORIAL BOARDS

- 2020 – present *Philosophical Transactions of the Royal Society of London* (Editorial Board)
- 2014 – 2019 *Proceedings of the Royal Society A* (Editorial Board)
- 2012– present *EMS Surveys in Mathematical Sciences* (Editorial Board)
- 2010 – 2018 *SIAM Review* (Editorial Board)
- 2013 – 2013 *Chinese Journal of Mathematics* (Editorial Board)
- 2005 – 2012 *ACTA Automatica Sinica* (Editorial Board)
- 1989 – 1998 *J of Mathematical Systems, Estimation, and Control* (Communicating Ed)
- 1989 – 1993 *Systems and Control Letters* (Associate Ed)
- 1991 – 2000 *International Journal of Adaptive Control and Signal Processing*
- 1989 – 1993 *Progress in Systems and Control Theory*, Birkhäuser, Boston (Associate Ed)
- 1989 – 1993 *Systems and Control: Foundations and Applications* (Associate Ed)
- 1996 – 1993 *Applied and Computational Control, Signals, and Circuits* (Editorial Board)

VISITING POSITIONS

March 2004	Visiting Professor, University of Kyoto
October 2002	Gordon McKay Visiting Professor, UC Berkeley
March – June 1994	Visiting Professor, Technion, Haifa
March 1989	Distinguished Visiting Professor, Arizona State University
July – Aug 1989	Visiting Scientist, Inst of Applied Systems Analysis, Vienna, Austria
July – Aug 1988	Visiting Professor, Chinese Academy of Sciences, Shanghai, China
Oct – Nov 1985	Visiting Scientist, USSR Academy of Sciences, Moscow
1975 – 1992	Visiting Professor, University of Padova and CNR, Italy (several instances, a month at a time)
1975–1976	SIAM Visiting Lecturer

PATENTS

1999	United States Patent 5,940,791, “Method and Apparatus for Speech Analysis and Synthesis” (joint with C. I. Byrnes), August 17, 1999
2001	United States Patent 6,256,609, “Method and Apparatus for Speaker Recognition” (joint with C. I. Byrnes), July 3, 2001
2002	United States. Patent 6,400,310, “A Tunable High-Resolution Spectral Estimator” (joint with C. I. Byrnes and T. T. Georgiou), June 4, 2002
2007	United States Patent 7,233,898, “Method and Apparatus for Speaker Verification Using a Tunable High-Resolution Spectral Estimator” (joint with C. I. Byrnes and T. T. Georgiou), June 19, 2007

PLENARY LECTURES AND SELECTED INVITED ADDRESSES

2022	Plenary speaker at the University of Hainan, Haikou, January 14, 2022.
2021	Plenary speaker at the Innovation & Emerging Industries Development Forum, Shanghai, December 2, 2021.
2021	Invited lecture at the School of Mathematical Sciences, Shanghai Jiao Tong University, December 10, 2021.
2021	Introductory address at the Dante forum, Duolun museum, Shanghai, December 18, 2021.
2021	Keynote speaker at 2021 Yantai Academician Forum, October 24, 2021.
2021	Invited Speaker at University of Electronic Science and Technology of China (UESTC), Match 22, 2021.
2020	Invited speaker, Sun Yatsen University, Guangzhou, December 10, 2020.
2019	Keynote speaker at the 4th International Conference on Communication, Image and Signal Processing, Phuket, Thailand, November 13-16, 2019.
2019	Colloquium speaker, Institute of Astrostatistics, Monteporzio Catone, Italy, October 10, 2019
2019	Plenary speaker at the International Health Industry Forum, Yantai, China, September 21-23, 2019.
2019	Invited speaker at the 2019 International Conference on Innovation and Emerging Industry Development, Shanghai, September 17-18, 2019.
2019	Colloquium speaker, University of Michigan, USA, August 19, 2019
2019	Invited speaker Mediterranean Control Conference, Israel, July 1-4, 2019
2018	Plenary speaker at the Sino-Swedish Science and Technology Exchange Annual Meeting, Shenzhen, November 28, 2018.
2018	Invited speaker at the University of Guangzhou, November 30, 2018.

- 2018 Keynote Speaker at the 2018 Chinese Control and Decision Conference (2018 CCDC), Shenyang, China, June 9-11, 2018.
- 2018 Invited speaker at the Huazhong University of Science and Technology, June 20, 2018.
- 2018 Invited speaker at the 2018 Symposium on Autonomous Systems, Chongqing, China, May 19-21
- 2017 Invited speaker at the 2nd International Conference on Communication, Image and Signal Processing (CCISP 2017), Shenzhen, China, November 17-19, 2017.
- 2017 Academician at Campus Lecture, Beijing Jiao Tong University, November 16, 2017.
- 2017 One-hour invited address at the 2017 International Conference of Innovation and Entrepreneurship, Jingjiang, China, September 22, 2017.
- 2017 Invited speaker at the Workshop on Herglotz-Neuman functions and their applications, Institut Mittag-Leffler, Djursholm, Sweden, May 8-12, 2017.
- 2017 Colloquium speaker at the Institute of Systems Research, University of Maryland, USA, May 3, 2017.
- 2017 Keynote speaker at SJTU Future Information Technology International Forum for Young Scholars (2nd SIFYS-2017), Shanghai, April 13, 2017.
- 2017 Invited speaker at the 2017 International Symposium on Computational and Applied Mathematics, February 26-28, 2017, Sanya, China.
- 2016 Peter Sagirow Distinguished Lecture, University of Stuttgart, Germany, November 2, 2016.
- 2016 Kwan Chao-Chih Distinguished Lecture, Academy of Mathematics and System Science, Beijing, July 18, 2016.
- 2016 Keynote speaker at International Conference on Probability and Stochastic Analysis (ICPSA 2015), Shanghai, July 19-22, 2015.
- 2015 Invited speaker at the First IFAC Conference on Modeling, Identification and Control of Nonlinear Systems (MICNON 2015) dedicated to the memory of Vladimir Yakubovich (1926-2012), Saint Petersburg, Russia, June 24-26, 2015.
- 2015 Invited speaker at International Conference Optimization and Applications in Control and Data Science on the occasion of Boris Polyak's 80th birthday, Moscow, Russia, May 13-15, 2015.
- 2014 Invited plenary speaker at the Third International Conference on Power, Control, Signal Processing and Computations (EPSCICON), Thrissur, Kerala, India, January 8 - 10, 2014.
- 2012 Invited plenary speaker at 5th International Conf. on Optimization and Control with Applications, Beijing, China, 4-8 Dec. 2012.
- 2012 Invited plenary speaker at Pujiang Innovation Forum (Future Science Forum), Shanghai, China, 3-5 Nov. 2012.
- 2011 Invited plenary speaker at the 18th IFAC World Congress, Milano, Italy, August 28 - September 2, 2011.
- 2011 Invited plenary speaker at the 25th IFIP Conference on System Modeling and Optimization, Berlin, Germany, September 12 - 16, 2011.
- 2010 Invited speaker at the symposium on Systems, Control, and Signal Processing, Kyoto, Japan, March 29-31, 2010.
- 2009 Invited one-hour semi-plenary lecture at the combined 48th IEEE Conference on Decision and Control and 28th Chinese Control Conference, Shanghai, China, Dec. 16-18, 2009.
- 2009 Invited speaker in Colloquia Patavina, Univ. of Padova, Italy, Oct. 13, 2009.

- 2009 Reid Prize Lecture, 2009 SIAM Annual Meeting, Denver, Colorado, USA, July 6–10, 2009.
- 2009 Colloquium speaker at University of Würzburg, Germany, July 17, 2009.
- 2009 Invited speaker at the International Conference on Approximation Methods for Design and Control, Buenos Aires, Argentina, March 9–11, 2009.
- 2009 Invited speaker at the Oberwolfach Workshop in Control Theory, Mathematisches Forschungsinstitut Oberwolfach, Germany, February 22–28, 2009.
- 2009 Invited speaker at the Fourth International Conference on Control Sciences, Moscow, January 26 - 30, 2009.
- 2008 Invited speaker at the Workshop on Linear Systems Theory: Model Reduction, Sde Boker, Israel, September 15-19, 2008.
- 2007 Invited speaker at International Conference on Modeling, Estimation and Control, Venice, Italy, October 4–5, 2007.
- 2017 Colloquium speaker at the Institute of Systems Research, University of Maryland, USA, May 3, 2017.
- 2007 Invited plenary speaker at MathESTIA 2007, Biarritz, France, April 24–27, 2007.
- 2007 Invited speaker at International conference to mark the 100th anniversary of the birth of Mark Krein, Odessa, Ukraine, April 9 - 14, 2007.
- 2006 Invited speaker at Symposium in honor of Bill Gragg at the occasion of his 70th birthday, Naval Postgraduate School, Monterey, Calif., Nov. 3-4, 2006.
- 2006 Invited speaker at Symposium in honor of Michiel Hazewinkel at his retirement, CWI, Amsterdam, September 7, 2006.
- 2006 Invited plenary lecturer at the 25th Chinese Control Conference (CCC2006), Harbin, China, August 7-10, 2006.
- 2006 Invited plenary lecturer at the International Congress on the Applications of Mathematics (ICAM), Santiago de Chile, March 13-17, 2006.
- 2005 Invited speaker at the Second Sde Boker Workshop on Linear Systems, Israel, September 11-17, 2005.
- 2005 An invited series of lectures at the 27th Finnish Summer School on Probability Theory, Åbo Akademi University, Åbo/Turku, Finland, June 6 –10, 2005.
- 2005 Invited speaker at the International Conference on Optimization and Control, dedicated to 70th birthday of Boris Polyak, Moscow, May 19-20, 2005.
- 2004 Invited speaker at the Workshop on Observation and Estimation, Center for Advanced Studies in Mathematics, Ben-Gurion University of the Negev, Israel, July 12 - 16, 2004.
- 2004 Semi-plenary invited presentation at the International Symposium on the Mathematical Theory of Networks and Systems (MTNS 2004), Leuven, Belgium, July 5–9, 2004.
- 2004 Invited speaker at the International Workshop on Dynamical Systems and Control, Technion, Haifa, June 20–22, 2004.
- 2003 Invited speaker at the Workshop on the Geometry in Nonlinear Control, Stephan Banach International Mathematical Center, June 16 - 21, 2003.
- 2002 Gordon McKay Lecture Series at UC Berkeley, October 11 - 17, 2002.
- 2002 Distinguished Lecturer in EECS Joint Colloquium, Berkeley, Oct. 16, 2002.
- 2002 Invited speaker at the Symposium on New Trends in Nonlinear Dynamics and Control, and their Applications, Naval Postgraduate School, Monterey, California, October 18–19, 2002.
- 2002 Invited speaker at the Satellite Conference of ICM 2002 on Optimization and Control, Xian, China, August 30–September 1, 2002.
- 2002 Invited speaker at the Stieltjes Analysis Colloquium, Thomas Stieltjes Institute for Mathematics, Amsterdam, the Netherlands, April 8, 2002.

- 2001 Invited lecturer at the minicourse *A short course on Nevanlinna-Pick interpolation theory*, Åbo Academi University, November 26 - 29, 2001.
- 2001 Invited speaker at *Cybernetics in the 21st Century: Information and Complexity in Control Theory*, University of Tokyo, Japan, November 1–2, 2001.
- 2001 Plenary speaker at the *Fourth SIAM Conference on Linear Algebra in Signals, Systems and Control*, Boston, USA, August 13-16, 2001
- 2001 Plenary speaker at the *Fifth IFAC Symposium on Nonlinear Control Systems (NOLCOS 2001)*, Saint Petersburg, Russia, July 4 - 6, 2001.
- 2000 Plenary speaker at *Asian Control Conference (ASCC)*, Shanghai, China, July 4–7, 2000.
- 2000 Zaborszky Lecturer for the year 2000, Washington University, St. Louis, May 8, 9, and 10, 2000. A series of three lectures.
- 1999 Plenary speaker at the *Sixth St. Petersburg Symposium on Adaptive Systems Theory*, St. Petersburg, Russia, September 7-9, 1999.
- 1999 Invited speaker at *Recent Advances in Systems and Control*, Washington University, St. Louis, December 1, 1999.
- 1999 Invited speaker at *Advances in Systems Theory*, Cambridge, Massachusetts, October, 15–16, 1999
- 1998 Plenary speaker at *International Conference of Dynamical Systems: Stability, Control, Optimization*, Minsk, Belarus, September 28–October 4, 1998.
- 1997 Invited speaker at *Operators, Systems, and Linear Algebra: Three Decades of Algebraic Systems Theory*, Kaiserslautern, Germany, September 24–26, 1997.
- 1997 Plenary speaker at *International Conference on Control of Oscillations and Chaos*, St. Petersburg, Russia, August 27–29, 1997.
- 1997 Two-hour Tutorial Lecture at the *11th IFAC Symposium on System Identification*, Fukuoka, Japan, July 8–11, 1997.
- 1996 Plenary speaker at Conference on Stochastic Differential and Difference Equations, Győr, Hungary, August 21–24, 1996.
- 1996 Plenary speaker at the *12th International Symposium on the Mathematical Theory of Networks and Systems (MTNS96)*, St Louis, June 1996.
- 1995 Invited speaker at *Workshop on the dynamics and control of physical systems*, Cortona, Italy, May 22–25, 1995.
- 1995 Plenary speaker at Workshop on *Nonlinear and Game Theoretic Control Synthesis*, Euler Mathematical Institute, St. Petersburg, March 13–26, 1995.
- 1995 Plenary speaker at the *Annual Meeting of Finnish Mathematicians*, Vaasa, Finland, January 9–10, 1995.
- 1994 Speaker at special workshop organized in my honor at the occasion of receiving an honorary membership in the Hungarian Operational Research Society, Budapest, October 31, 1994.
- 1994 Plenary speaker, IEEE European Workshop on Computer Intensive Methods in Control and Signal Processing, Prague, September 7–9, 1994.
- 1994 Keynote speaker, IFAC Symposium on Modeling and Identification, Herzelia, Israel, June 21, 1994.
- 1993 Invited speaker at workshop on "Systems and Control Theory: Retrospect and Prospect", Cortona, Italy, April 15–20, 1993.
- 1992 Invited speaker Third Conference on Computation and Control, Bozeman, Montana, August 5–11, 1992.
- 1992 Invited speaker at Systems, Models and Feedback: Theory and Applications. Workshop in honor of Professor Antonio Ruberti, Capri, June 15–17, 1992.
- 1991 Invited speaker at Stochastic Theory and Adaptive Control Workshop (sponsored by NSF), University of Kansas, September 26–28, 1991.
- 1991 Plenary speaker at Preconf. to the MTNS, Hangzhou, China, June 13, 1991.
- 1990 Plenary speaker at Second Conference on Computation and Control, Bozeman, Montana, August 1 - 11, 1990.

DISSERTATION STUDENTS (proforma students excluded)

- 1979 Michele Pavon, PhD, now Professor, University of Padova, Italy
- 1980 Faris Badawi, PhD, now Professor, University of Petroleum and Minerals, Daharan, Saudi Arabia
- 1986 Andrea Gombani, PhD, now Senior Researcher, Consiglio Nazionale delle Ricerche, Padova, Italy
- 1991 Anders Rantzer, PhD, SIAM Best Student Paper Award 1990, now Professor of Automatic Control, University of Lund, Sweden, Member of the Royal Swedish Academy of Engineering Sciences (IVA)
- 1992 Yishao Zhou, PhD, now University Lecturer of Mathematics, Stockholm University, Sweden
- 1992 Jan-Åke Sand, Licentiate
- 1994 Martin Hagström, Licentiate
now Head of Division, Swedish National Defence Research Institute (FOI)
- 1994 Jan-Åke Sand, PhD, now Chief Analyst at SEB
- 1995 Mattias Nordin, Licentiate (codirected with Per-Olof Gutman)
- 1998 Jöran Petersson, Licentiate (codirected with K. Holmström)
- 1998 Jore Mari, PhD, now at General Electric Global Research, München
- 1998 Anders Dahlén, Licentiate
- 2000 Magnus Egerstedt, PhD (codirected with X. Hu), postdoc at Harvard, now Professor at Georgia Tech, Foreign Member of the Royal Swedish Academy of Engineering Sciences (IVA)
- 2000 Mattias Nordin, PhD (codirected with Per-Olof Gutman), now Head of Development at Volvo Construction Equipment, Member, Industrial Research Committee of Royal Swedish Academy of Engineering (IVA)
- 2001 Per Enqvist, PhD, Associate Professor at the Royal Institute of Technology, Stockholm, Sweden
- 2001 Claudio Altafini, PhD (codirected with X. Hu), now Professor of Automatic Control at Linköping University, Sweden
- 2001 Anders Dahlén, PhD, now working with Research and Development at Telia Research, Stockholm
- 2001 Camilla Landén, PhD (codirected with T. Björk)
- 2002 Ryoza Nagamune, PhD, IEEE Control System Society Best Student Paper Prize 2001, Postdoc at UC Berkeley, now Professor at Univ. British Columbia
- 2005 Anders Blomqvist, PhD, Financial Analyst at Kaupthing Bank
- 2006 Gianantonio Bortolin, PhD (codirected with Per-Olof Gutman), now works with R & D at Volvo Construction Equipment
- 2006 Christelle Gaillemard, Licentiate (codirected with Per-Olof Gutman)
- 2008 Giovanna Fanizza, PhD, now at SwissQuant Group AG, Zürich, Switzerland
- 2008 Johan Karlsson, PhD, finalist for IEEE Control System Society Best Student Paper Prize in 2007 and in 2008, now Associate Professor at KTH, Stockholm.
- 2009 Yohei Kuroiwa, PhD
- 2011 Enrico Avventi, PhD

2017 Bin Zhu (codirected with Giorgio Picci), Now Assistant Professor at the Sun Yatsen University, Guangzho, China

2019 Axel Ringh (codirected with Johan Karlsson),

PRESENT GRADUATE STUDENTS

Yufang Cui
Fakhar Haider
Wenqi Cao
Guangyu Wu
Bao Di

POSTDOCTORAL FELLOWS

1989-1990 Xiaoming Hu, Gustafsson Postdoctoral Fellow
now Professor at KTH

1991-1992 Alexander Megretski, Gustafsson Postdoctoral Fellow
now Professor at MIT

1993-1994 Vincent Blondel, Gustafsson Postdoctoral Fellow
now Professor and President of the Catholic University of Lovain, Belgium

1999-2000 Alessandro Chiuso, TMR Postdoctoral Fellow
now Assistant Professor at the University of Padova

2000-2001 Jarmo Malinen, TMR Postdoctoral Fellow
Recipient of the Nevanlinna Dissertation Prize for the best Finnish mathematical dissertation in year 2000

2003-2004 Chung-Yao Kao, Gustafsson Postdoctoral Fellow

2019 -2021 Wenxi Zhang

2020 -2023 Yu Lin

PUBLICATIONS**Books**

1. *Linear Stochastic Systems: A Geometric Approach to Modeling, Estimation and Identification* (with G. Picci), Springer Berlin Heidelberg, 2015.
2. Chinese translation of the previous book (in two volumes), Shanghai Scientific & Technical Publishers, 2018.
3. *New Directions and Applications in Control Theory* (Editor, with W. P. Dayawansa and Y. Zhou), Springer Verlag, 2005.
4. *Computational and Combinatorial Methods in Systems Theory* (Editor, with C.I. Byrnes), North-Holland, 1986.
5. *Theory and Applications of Nonlinear Control Systems* (Editor, with C.I. Byrnes), North-Holland, 1986.
6. *Modelling, Identification and Robust Control* (Editor, with C.I. Byrnes), North-Holland, 1986.
7. *Frequency Domain and State Space Methods for Linear Systems* (Editor, with C.I. Byrnes), North-Holland, 1986.

Refereed articles

1. Spectral Factorization of Rank Deficient Rational Densities with Application to Identification (with W. Cao),
2. Quantitative Error Analysis of Spectral Density Estimation Using Covariance Lags (with G. Wu), arXiv:2303.11084 (2023).
3. Synchronization of nonlinear delayed semi-Markov jump neural networks via distributed delayed impulsive control (with Yu Lin), *Systems & Control Letters*, April 2023.
4. General Distribution Steering: A Sub-optimal Solution by Convex Optimization (with G. Wu), arXiv:2301.06227 (2023).
5. Group Steering: Approaches Based on Power Moments (with G. Wu), arXiv:2211.13370 (2022).
6. A Non-Gaussian Bayesian Filter Using Power and Generalized Logarithmic Moments (with G. Wu), arXiv:2211.13383 (2022).
7. A Multivariate Non-Gaussian Bayesian Filter Using Power Moments (with G. Wu), arXiv:2211.13374 (2022).
8. A Non-Classical Parameterization for Density Estimation Using Sample Moments (with G. Wu), arXiv:2201.04786, (2022).
9. Density Steering by Power Moments (with G. Wu), Proc. IFAC World Congress 2023.

10. Non-Gaussian Bayesian Filtering by Density Parameterization Using Power Moments (with G Wu), *Automatica* 153, 2023, arXiv:2207.08519v1.
11. Identification of Low Rank Vector Processes (with W. Cao and G. Picci), arXiv: 2111.10899v1.
12. Modeling of Low Rank Time Series (with W. Cao and G. Picci), *Automatica* 151, May 2023, arXiv:2109.11814v3.
13. Modeling and Identification of Low Rank Vector Processes (with G. Picci and W. Cao), *SYSID 2021*, Padua (IFAC symposium), arXiv: 2012.05004v1.
14. *On a Fejér-Riesz factorization of generalized trigonometric polynomials* (with T.T. Georgiou), arXiv:2005.11920v1.
15. *Spectral rank, feedback, causality and the indirect method for CARMA identification* (with W. Cao and G. Picci), to be published in Proc of the 2020 Conference on Decision and Control (CDC2020); arXiv:2004.02463v2.
16. *On analytic interpolation with non-classical constraints for solving problems in robust control* (with A. Ringh and J. Karlsson), submitted to the 2020 Conference on Decision and Control (CDC2020).
17. *An analytic interpolation approach to stability margins with emphasis on time delay* (with A. Ringh and J. Karlsson), arXiv.1912.08734v1
The Covariance Extension Equation: A Riccati-type Approach to Analytic Interpolation (with Yufang Cui), *IEEE Trans. Automatic Control* 67(11) (Nov. 2022), 5825-5840, arXiv:2010.07081v2
18. *Multivariable analytic interpolation with complexity constraints: A modified Riccati approach* (with Yufang Cui), arXiv:1903.05418v1.
19. *A modified Riccati approach to analytic interpolation with applications to system identification and robust control* (with Yufang Cui), Proc. Chinese Conference on Decision and Control, Nanchang, June 3-5, 2019.
20. *Dynamic relations in sampled processes* (with T.T. Georgiou), *IEEE Control Systems Letters*, 3(1), 2019, pp. 144-149.
21. *Lower bounds on the maximum delay margin by analytic interpolation* (with A. Ringh and J. Karlsson), Proc, 2018 IEEE Conference on Decision and Control (CDC 2018), Miami Beach, pp. 5463-5469.
22. *Multidimensional rational covariance extension with approximate covariance matching* (with A. Ringh and J. Karlsson), *SIAM J. Control and Optimization*, 56(2), 2018, pp. 913-944.
23. *Optimal estimation with missing observations via balanced time-symmetric stochastic models* (with T.T. Georgiou), *IEEE Trans. Automatic Control* 62(11) (November 2017), pp. 5590-5603.
24. *Likelihood analysis of power spectra and generalized moment problems* (with T.T. Georgiou), *IEEE Trans. Automatic Control* 62(9) (Sept. 2017), pp. 4580 - 4592.

25. *Partial realization theory and system identification redux*, Proc. 11th Asian Control Conference, Gold Coast, Australia, Dec. 17-20, 2017, pp. 1946-1950.
26. *Further results on multidimensional rational covariance extension with application to texture generation* (with A. Ringh and J. Karlsson), 2017 IEEE Conf. Decision and Control (CDC), Melbourne, Dec. 12-15, pp. 4038-4045.
27. *Kalman's influence on my scientific work: Some recollections and reflections*, IEEE Control Systems Magazine 37(2), April 2017, 156 -157, invited paper.
28. *Kalman's influence on my scientific work: Some recollections and reflections* (extended version in Chinese), All About System and Control 4(2), 1017, pp. 13-17.
29. *Modeling of stationary periodic time series by ARMA representations* (with G. Picci), In: Boris Goldengorin (Ed.). Optimization and Its Applications in Control and Data Sciences: in Honor of Boris T. Polyak's 80th Birthday. Springer Optimization and Its Applications, Vol. 115, Pages 281-314, Springer, New York, 2016.
30. *Multidimensional rational covariance extension with applications to spectral estimation and image compression* (with A. Ringh and J. Karlsson), SIAM J. Control and Optimization 54(4) (2016), 1950-1982.
31. *The multidimensional moment problem with complexity constraint* (with J. Karlsson and A. Ringh), Integral Equations and Operator Theory 84 (2016), 395-418.
32. *An identification approach to image deblurring* (with Bin Zhu), 2016 Chinese control conference, Chengdu, China, pp. 235-241.
33. *The multidimensional circulant rational covariance extension problem: Solutions and applications in image compression* (with J. Karlsson and A. Ringh), Proc. 1015 IEEE Decision and Control Conference, Osaka, Japan, pp. 5320-5327.
34. *Spectral estimation of periodic and skew periodic random signals and approximation of spectral densities* (with A. Ringh), Proceedings of the 33rd Chinese Control Conference, July 28-30, 2014, Nanjing, China, pp. 5322-5327.
35. *On time-reversibility of linear stochastic models* (with T.T. Georgiou), IFAC World Congress, 2014.
36. *Moment-based Dirac mixture approximation of circular densities* (with Uwe D. Hanebeck), IFAC World Congress, 2014.
37. *On the multivariate circulant rational covariance extension problem* (with C. Masiero and G. Picci), Proc. 52nd Conf. Decision and Control (CDC 2013), 2013.
38. *The circulant rational covariance extension problem: the complete solution* (with G. Picci), IEEE Trans. Automatic Control 58 ((November 2013), 2848-2861.
39. *The separation principle in stochastic control, redux* (with T.T. Georgiou), IEEE Trans. Automatic Control 58 (October 2013), 2481-2494.
40. *ARMA identification of graphical models* (with E. Avventi and B. Wahlberg), IEEE Trans. Automatic Control 58 (May 2013), 1167-1178.

41. *Revisiting the separation principle in stochastic control* (with T.T. Georgiou), Proc. 51st Conf. Decision and Control (CDC 2012), 2012.
42. *Graphical models of autoregressive moving-average processes* (with E. Avventi and B. Wahlberg), Proc. 2010 MTNS.
43. *The inverse problem of analytic interpolation with degree constraint and weight selection for control synthesis* (with J. Karlsson and T. T. Georgiou), IEEE Trans. Automatic Control, **AC-55** (2010), 405–418.
44. *On the stability and instability of Padé approximants* (with C. I. Byrnes), in Perspectives in Mathematical System Theory, Control, and Signal Processing, J.C. Willems, S. Hara, Y. Ohta and H. Fujioka (Eds.), Springer Verlag Lecture Notes Series in Control and Information Sciences, 2010, pp. 165–175.
45. *The moment problem for rational measures: convexity in the spirit of Krein* (with C. I. Byrnes), in Modern Analysis and Application: Mark Krein Centenary Conference, Vol. I: Operator Theory and Related Topics, Book Series: Operator Theory Advances and Applications Volume 190, Birkhuser, 2009, pp. 157 – 169.
46. *A global injective function theorem* (with C. I. Byrnes), submitted for publication.
47. *On degree-constrained analytic interpolation with interpolation points close to the boundary* (with J. Karlsson), IEEE Trans. Automatic Control **54**(6) (2009), 1412–1418.
48. *Important Moments in Systems, Control and Optimization* (with C.I.Byrnes), Proc. 48th IEEE Conf. Decision and Control, 2009.
49. *Important moments in systems and control* (with C. I. Byrnes), SIAM J. Control and Optimization **47**(5) (2008), 2458–2469.
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